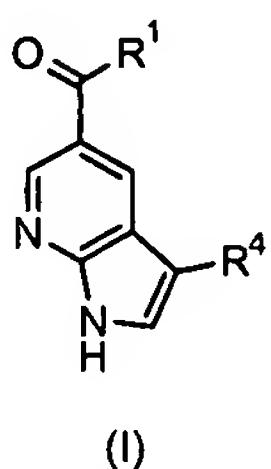


AMENDMENTS TO THE CLAIMS:

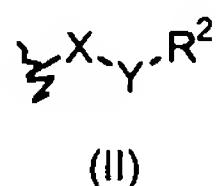
This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A compound of formula (I):



and the pharmaceutically acceptable salts, and other pharmaceutically acceptable biohydrolyzable derivatives thereof;

wherein R¹ is an optionally substituted C₃₋₁₂ carbocyclyl or C₃₋₁₂ heterocyclyl group or group of formula (II)



wherein X is NR³, O, S or (CR²²R²²)_n, Y is absent or is NR²³, O, or (CR²³R²³)_n, R² is optionally substituted C₁₋₁₂ alkyl, C₂₋₁₂ alkenyl, C₂₋₁₂ alkynyl, C₃₋₁₂ carbocyclyl or C₃₋₁₂ heterocyclyl, and R⁴ is an optionally substituted five or six membered heterocyclyl group or an optionally substituted six membered carbocyclyl group.

2. (Original) A compound as claimed in claim 1 wherein the optionally substituted carbocyclyl or heterocyclyl group of R¹ is optionally fused to a partially saturated, unsaturated or fully saturated five to seven membered ring containing zero to three heteroatoms, and each substitutable carbon atom in R¹, including the optional fused ring, is optionally and independently substituted by one or more of halogen, C₁₋₁₂ alkyl, C₂₋₁₂ alkenyl, C₂₋₁₂ alkynyl, haloC₁₋₁₂alkyl, C₃₋₁₂ carbocyclyl, C₃₋₁₂ heterocyclyl, (CH₂)_nOR⁵, (CH₂)_nNR⁵₂(CH₂)_nSR⁵, OR⁵, SR⁵, NO₂, CN, NR⁵₂, NR⁵COR⁵, NR⁵CONR⁵₂, NR⁵COR⁵, NR⁵CO₂R⁵, CO₂R⁵, COR⁵, CONR⁵₂, S(O)₂R⁵, SONR⁵₂, S(O)R⁵, SO₂NR⁵₂, or NR⁵S(O)₂R⁵ wherein the C₁₋₁₂ alkyl group optionally

contains one or more insertions selected from -O-, -N(R⁵)-, -S-, -S(O)- and -S(O₂)-; and each saturated carbon in the optional fused ring is further optionally and independently substituted by =O, =S, NNR⁶₂, =N-OR⁶, =NNR⁶COR⁶, =NNR⁶CO₂R⁶, =NNSO₂R⁶, or =NR⁶; and each substitutable nitrogen atom in R¹ is optionally substituted by R⁷, COR⁷, SO₂R⁷ or CO₂R⁷;

wherein n is 1 to 6, preferably n is 1, 2 or 3;

wherein R⁵ is hydrogen, C₁₋₁₂ alkyl, C₃₋₁₂ carbocyclyl or C₃₋₁₂ heterocyclyl, optionally substituted by one or more of C₁₋₆ alkyl, C₃₋₁₂ carbocyclyl, C₃₋₁₂ heterocyclyl, halogen, C₁₋₆ haloalkyl, OR⁸, SR⁸, NO₂, CN, NR⁸R⁸, NR⁸COR⁸, NR⁸CONR⁸R⁸, NR⁸COR⁸, NR⁸CO₂R⁸, CO₂R⁸, COR⁸, CONR⁸₂, S(O)₂R⁸, SONR⁸₂, S(O)R⁸, SO₂NR⁸R⁸, NR⁸S(O)₂R⁸, wherein the C₁₋₁₂ alkyl group optionally incorporates one or two insertions selected from the group consisting of -O-, -N(R⁸)-, -S(O)- and -S(O₂)-, wherein each R⁸ may be the same or different and is as defined below;

wherein two R⁵ in NR⁵₂ may optionally form a partially saturated, unsaturated or fully saturated three to seven membered ring containing one to three heteroatoms, optionally and independently substituted by one or more of C₁₋₆ alkyl, halogen, C₁₋₆ haloalkyl, OR⁸, SR⁸, NO₂, CN, NR⁸R⁸, NR⁸COR⁸, NR⁸CONR⁸R⁸, NR⁸COR⁸, NR⁸CO₂R⁸, CO₂R⁸, COR⁸, CONR⁸₂, S(O)₂R⁸, SONR⁸₂, S(O)R⁸, SO₂NR⁸R⁸, NR⁸S(O)₂R⁸,

wherein the C₁₋₆ alkyl group optionally incorporates one or two insertions selected from the group consisting of -O-, -N(R⁸)-, -S(O)- and -S(O₂)-, wherein each R⁸ may be the same or different and is as defined below;

wherein R⁶ is hydrogen, C₁₋₁₂ alkyl, C₃₋₁₂ carbocyclyl or C₃₋₁₂ heterocyclyl, optionally substituted by one or more of C₁₋₆ alkyl, halogen, C₁₋₆ haloalkyl, OR⁸, SR⁸, NO₂, CN, NR⁸R⁸, NR⁸COR⁸, NR⁸CONR⁸R⁸, NR⁸COR⁸, NR⁸CO₂R⁸, CO₂R⁸, COR⁸, CONR⁸₂, S(O)₂R⁸, S(O)R⁸, SO₂NR⁸R⁸, NR⁸S(O)₂R⁸, wherein the C₁₋₁₂ alkyl group optionally incorporates one or two insertions selected from the group consisting of -O-, -N(R⁸)-, -S(O)- and -S(O₂)-, wherein each R⁸ may be the same or different and is as defined below;

wherein R⁷ is hydrogen, C₆₋₁₂ aryl, C₁₋₆ alkyl or C₁₋₆ haloalkyl;

wherein R⁸ is hydrogen, C₁₋₆ alkyl, or C₁₋₆ haloalkyl.

3. (Currently Amended) A compound as claimed in claim 1 or 2 wherein Y is absent or is NR²³, O, (CR²³R²³)_n,

wherein each R²³ is H, C₁₋₄ alkyl, C₁₋₄ alkoxy or C₁₋₄ haloalkyl;

and n is 1 to 6, preferably n is 1, 2, 3 or 4; and

R² is optionally substituted C₁₋₁₂ alkyl, C₂₋₁₂ alkenyl, C₂₋₁₂ alkynyl, C₃₋₁₂ carbocyclyl or C₃₋₁₂ heterocyclyl, wherein the optionally substituted carbocyclyl or heterocyclyl group is optionally fused to one to three unsaturated, partially unsaturated or fully saturated five to seven membered rings containing zero to three heteroatoms;

each substitutable carbon atom in R², including the optional fused ring, is optionally and independently substituted by one or more of C₁₋₁₂ alkyl, C₃₋₁₂ cycloalkyl, C₃₋₁₂ heterocycloalkyl, C₃₋₁₂ aryl, C₃₋₁₂ heteroaryl halogen, C₁₋₁₂ haloalkyl, OR⁹, SR⁹, NO₂, CN, NR⁹R⁹, NR⁹COR⁹, NR⁹CONR⁹R⁹, NR⁹COR⁹, NR⁹CO₂R⁹, CO₂R⁹, COR⁹, CONR⁹R⁹, S(O)₂R⁹, SONH₂, S(O)R⁹, SO₂NR⁹R⁹, NR⁹S(O)₂R⁹, wherein each R⁹ may be the same or different and is as defined below and wherein:

the C₁₋₁₂ alkyl group optionally incorporates one or two insertions selected from the group consisting of -O-, -C(O)-, -N(R⁹)-, -S(O)- and -S(O₂)-, wherein each R⁹ may be the same or different and is as defined above;

the C₁₋₁₂ alkyl, C₃₋₁₂ cycloalkyl, C₃₋₁₂ heterocycloalkyl, C₃₋₁₂ aryl, or C₃₋₁₂ heteroaryl groups are optionally substituted by one or more of halogen, C₁₋₁₂ haloalkyl, OR⁹, SR⁹, NO₂, CN, NR⁹R⁹, NR⁹COR⁹, NR⁹CONR⁹R⁹, NR⁹COR⁹, NR⁹CO₂R⁹, CO₂R⁹, COR⁹, CONR⁹R⁹, S(O)₂R⁹, SONH₂, S(O)R⁹, SO₂NR⁹R⁹, NR⁹S(O)₂R⁹, wherein each R⁹ may be the same or different and is as defined below; and

the C₃₋₁₂ cycloalkyl, C₃₋₁₂ heterocycloalkyl, C₃₋₁₂ aryl, or C₃₋₁₂ heteroaryl groups are optionally substituted by one or more C₁₋₁₂ alkyl groups;

each saturated carbon in R², including the optional fused ring, is further optionally and independently substituted by =O, =S, NNR⁹R⁹, =N-OR⁹, =NNHCOR⁹, =NNHCO₂R⁹, =NNSO₂R⁹, or =NR⁹, wherein each R⁹ may be the same or different and is as defined below; and

each substitutable nitrogen atom in R² is optionally substituted by R¹⁰, COR⁹, SO₂R⁹ or CO₂R⁹ wherein each R⁹ and R¹⁰ may be the same or different and is as defined below;

wherein two R⁹ in NR⁹₂ may optionally form a partially saturated, unsaturated or fully saturated three to seven membered ring containing one to three heteroatoms, optionally and independently substituted by one or more of C₁₋₆ alkyl, halogen, C₁₋₆ haloalkyl, OR¹¹, SR¹¹, NO₂, CN, NR¹¹R¹¹, NR¹¹COR¹¹, NR¹¹CONR¹¹R¹¹, NR¹¹COR¹¹, NR¹¹CO₂R¹¹, CO₂R¹¹, COR¹¹, CONR¹¹₂, S(O)₂R¹¹, SONR¹¹₂, S(O)R¹¹, SO₂NR¹¹R¹¹, NR¹¹S(O)₂R¹¹,

wherein the C₁₋₆ alkyl group optionally incorporates one or two insertions selected from the group consisting of -O-, -N(R¹¹)-, -S(O)- and -S(O₂)-, wherein each R¹¹ may be the same or different and is as defined below;

wherein R¹¹ is hydrogen, C₁₋₆ alkyl, or C₁₋₆ haloalkyl;

wherein R⁹ is hydrogen, C₁₋₁₂ alkyl or C₃₋₁₂ aryl, optionally substituted by one or more of C₁₋₄ alkyl, halogen, C₁₋₄ haloalkyl, OR¹², SR¹², NO₂, CN, NR¹²R¹², NR¹²COR¹², NR¹²CONR¹²R¹², NR¹²COR¹², NR¹²CO₂R¹², CO₂R¹², COR¹², CONR¹²₂, S(O)₂R¹², SONH₂, S(O)R¹², SO₂NR¹²R¹², NR¹²S(O)₂R¹², wherein the C₁₋₁₂ alkyl group optionally incorporates one or two insertions selected from the group consisting of -O-, -N(R¹²)-, -S(O)- and -S(O₂)-, wherein each R¹² may be the same or different and is as defined below;

wherein R¹⁰ is C₁₋₁₂ alkyl or C₃₋₁₂ aryl, optionally substituted by one or more of C₁₋₄ alkyl, halogen, C₁₋₄ haloalkyl, OR¹², SR¹², NO₂, CN, NR¹²R¹², NR¹²COR¹², NR¹²CONR¹²R¹², NR¹²COR¹², NR¹²CO₂R¹², CO₂R¹², COR¹², CONR¹²₂, S(O)₂R¹², SONH₂, S(O)R¹², SO₂NR¹²R¹², NR¹²S(O)₂R¹², wherein the C₁₋₁₂ alkyl group optionally incorporates one or two insertions selected from the group consisting of -O-, -N(R¹²)-, -S(O)- and -S(O₂)-, wherein each R¹² may be the same or different and is as defined below;

wherein R¹² is hydrogen, C₁₋₄ alkyl, or C₁₋₄ haloalkyl.

4. (Currently Amended) A compound as claimed in ~~any one of claims 1 to 3~~ claim 1 wherein X is NR³; O, S or (CR²²-R²²)_n wherein R²² is independently one or more of halogen, C₁₋₁₂ alkyl, C₂₋₁₂ alkenyl, C₂₋₁₂ alkynyl, C₁₋₁₂ haloalkyl, C₆₋₁₂ carbocyclyl, C₅₋₁₂ heterocyclyl, (CH₂)_nOR⁵, (CH₂)_nNR⁵₂, OR⁵, SR⁵, NO₂, CN, NR⁵₂, NR⁵COR⁵, NR⁵CONR⁵₂, NR⁵COR⁵, NR⁵CO₂R⁵, CO₂R⁵, COR⁵, CONR⁵₂, S(O)₂R⁵, SONR⁵₂, S(O)R⁵, SO₂NR⁵₂, or NR⁵S(O)₂R⁵ wherein each R⁵ may be the same or different and is as defined above; and

wherein n is 1 to 6, preferably n is 1, 2, 3 or 4;

and wherein R³ is a lone electron pair, hydrogen, C₁₋₁₂ alkyl, C₂₋₁₂ alkenyl, C₂₋₁₂ alkynyl, C₃₋₁₂ carbocyclyl or C₃₋₁₂ heterocyclyl, each of which is optionally substituted, wherein:

the optionally substituted carbocyclyl or heterocyclyl group is optionally fused to one to three unsaturated, partially unsaturated or fully saturated five to seven membered rings containing zero to three heteroatoms,

each substitutable carbon atom in R³, including the optional fused ring, is optionally and independently substituted by one or more of C₁₋₁₂ alkyl, C₃₋₁₂ cycloalkyl, C₃₋₁₂ heterocycloalkyl, C₃₋₁₂ aryl, C₃₋₁₂ heteroaryl halogen, C₁₋₁₂ haloalkyl, OR¹³, SR¹³, NO₂, CN, NR¹³R¹³, NR¹³COR¹³, NR¹³CONR¹³R¹³, NR¹³COR¹³, NR¹³CO₂R¹³, CO₂R¹³, COR¹³, CONR¹³R¹³, S(O)₂R¹³, SONH₂, S(O)R¹³, SO₂NR¹³R¹³, NR¹³S(O)₂R¹³, wherein each R¹³ may be the same or different and is as defined above and wherein:

the C₁₋₁₂ alkyl group optionally incorporates one or two insertions selected from the group consisting of -O-, -C(O)-, -N(R¹³)-, -S(O)- and -S(O₂)-, wherein each R¹³ may be the same or different and is as defined above;

the C₁₋₁₂ alkyl, C₃₋₁₂ cycloalkyl, C₃₋₁₂ heterocycloalkyl, C₃₋₁₂ aryl, or C₃₋₁₂ heteroaryl groups are optionally substituted by one or more of halogen, C₁₋₁₂ haloalkyl, OR¹³, SR¹³, NO₂, CN, NR¹³R¹³, NR¹³COR¹³, NR¹³CONR¹³R¹³, NR¹³COR¹³, NR¹³CO₂R¹³, CO₂R¹³, COR¹³,

$\text{CONR}^{13}\text{R}^{13}$, $\text{S(O)}_2\text{R}^{13}$, SONH_2 , $\text{S(O)}\text{R}^{13}$, $\text{SO}_2\text{NR}^{13}\text{R}^{13}$, $\text{NR}^{13}\text{S(O)}_2\text{R}^{13}$, wherein each R^{13} may be the same or different and is as defined below; and

the C_{3-12} cycloalkyl, C_{3-12} heterocycloalkyl, C_{3-12} aryl, or C_{3-12} heteroaryl groups are optionally substituted by one or more C_{1-12} alkyl groups;

each saturated carbon in R^2 , including the optional fused ring, is further optionally and independently substituted by $=\text{O}$, $=\text{S}$, $\text{NNR}^{13}\text{R}^{13}$, $=\text{N-OR}^{13}$, $=\text{NNHCOR}^{13}$, $=\text{NNHCO}_2\text{R}^{13}$, $=\text{NNSO}_2\text{R}^{13}$, or $=\text{NR}^{13}$, wherein each R^{13} may be the same or different and is as defined below; and

each substitutable nitrogen atom in R^3 is optionally substituted by R^{14} , COR^{13} , SO_2R^{13} or CO_2R^{13} wherein each R^{13} and R^{14} may be the same or different and is as defined below;

wherein two R^{13} in NR^{13}_2 may optionally form a partially saturated, unsaturated or fully saturated three to seven membered ring containing one to three heteroatoms, optionally and independently substituted by one or more of C_{1-6} alkyl, halogen, C_{1-6} haloalkyl, OR^{15} , SR^{15} , NO_2 , CN , $\text{NR}^{15}\text{R}^{15}$, $\text{NR}^{15}\text{COR}^{15}$, $\text{NR}^{15}\text{CONR}^{15}\text{R}^{15}$, $\text{NR}^{15}\text{COR}^{15}$, $\text{NR}^{15}\text{CO}_2\text{R}^{15}$, CO_2R^{15} , COR^{15} , CONR^{15}_2 , $\text{S(O)}_2\text{R}^{15}$, SONR^{15}_2 , $\text{S(O)}\text{R}^{15}$, $\text{SO}_2\text{NR}^{15}\text{R}^{15}$, $\text{NR}^{15}\text{S(O)}_2\text{R}^{15}$,

wherein the C_{1-6} alkyl group optionally incorporates one or two insertions selected from the group consisting of $-\text{O}-$, $-\text{N}(\text{R}^{15})-$, $-\text{S(O)}-$ and $-\text{S(O}_2)-$, wherein each R^{15} may be the same or different and is as defined below;

wherein R^{15} is hydrogen, C_{1-6} alkyl, or C_{1-6} haloalkyl;

wherein R^{13} is hydrogen, C_{1-12} alkyl or C_{3-12} aryl, optionally substituted by one or more of C_{1-4} alkyl, halogen, C_{1-4} haloalkyl, OR^{16} , SR^{16} , NO_2 , CN , $\text{NR}^{16}\text{R}^{16}$, $\text{NR}^{16}\text{COR}^{16}$, $\text{NR}^{16}\text{CONR}^{16}\text{R}^{16}$, $\text{NR}^{16}\text{COR}^{16}$, $\text{NR}^{16}\text{CO}_2\text{R}^{16}$, CO_2R^{16} , COR^{16} , CONR^{16}_2 , $\text{S(O)}_2\text{R}^{16}$, SONH_2 , $\text{S(O)}\text{R}^{16}$, $\text{SO}_2\text{NR}^{16}\text{R}^{16}$, $\text{NR}^{16}\text{S(O)}_2\text{R}^{16}$, wherein the C_{1-12} alkyl group optionally incorporates one or two insertions selected from the group consisting of $-\text{O}-$, $-\text{N}(\text{R}^{16})-$, $-\text{S(O)}-$ and $-\text{S(O}_2)-$, wherein each R^{16} may be the same or different and is as defined below;

wherein R¹⁴ is C₁₋₁₂ alkyl or C₃₋₁₂ aryl, optionally substituted by one or more of C₁₋₄ alkyl, halogen, C₁₋₄ haloalkyl, OR¹⁶, SR¹⁶, NO₂, CN, NR¹⁶R¹⁶, NR¹⁶COR¹⁶, NR¹⁶CONR¹⁶R¹⁶, NR¹⁶COR¹⁶, NR¹⁶CO₂R¹⁶, CO₂R¹⁶, COR¹⁶, CONR¹⁶₂, S(O)₂R¹⁶, SONH₂, S(O)R¹⁶, SO₂NR¹⁶R¹⁶, NR¹⁶S(O)₂R¹⁶, wherein the C₁₋₁₂ alkyl group optionally incorporates one or two insertions selected from the group consisting of -O-, -N(R¹⁶)-, -S(O)- and -S(O₂)-, wherein each R¹⁶ may be the same or different and is as defined below;

wherein R¹⁶ is hydrogen, C₁₋₄ alkyl, or C₁₋₄ haloalkyl;

wherein when X is NR², R² and R³ can form a 3 to 12 membered heterocyclyl ring, more preferably a 5, 6, 7, 8, 9, 10, 11 or 12 membered ring, wherein said ring can be partially saturated, unsaturated or fully saturated containing one to three heteroatoms; wherein the heterocyclic group formed by R² and R³ can be optionally fused to one to three unsaturated, partially saturated or fully saturated 5 to 7 membered rings containing zero to three heteroatoms, any of said rings being optionally and independently substituted with one or more of C₁₋₆ alkyl, halogen, C₁₋₆ haloalkyl, OR²², SR²², NO₂, CN, NR²²R²², NR²²COR²², NR²²CONR²²R²², NR²²COR²², NR²²CO₂R²², CO₂R²², COR²², CONR²²₂, S(O)₂R²², SONR²²₂, S(O)R²², SO₂NR²²R²², NR²²S(O)₂R²², wherein the C₁₋₆ alkyl group optionally incorporates one or two insertions from -O-, -N(R²²)-, -S(O)- and -S(O₂)- and wherein each R²² may be the same or different.

5. (Currently Amended) A compound as claimed in ~~any one of claims 1 to 4~~ claim 1 wherein R⁴ is a six-membered carbocyclyl group or a five or six-membered heterocyclyl group containing from 1 to 4 heteroatoms independently selected from N, S or O, wherein the optionally substituted six-membered carbocyclyl or five or six-membered heterocyclyl group is optionally fused to a partially saturated, unsaturated or fully saturated five to seven membered ring containing zero to three heteroatoms, and each substitutable carbon or hetero-atom in R⁴ including the optional fused ring, is optionally and independently substituted by one or more of halogen, C₁₋₁₂ alkyl, C₂₋₁₂ alkenyl, C₂₋₁₂ alkynyl, C₁₋₁₂ haloalkyl, C₃₋₁₂ carbocyclyl, C₃₋₁₂ heterocyclyl, (CH₂)_nOR¹⁷, (CH₂)_nNR¹⁷₂, OR¹⁷, SR¹⁷, NO₂, CN, NR¹⁷₂, NR¹⁷COR¹⁷, NR¹⁷CONR¹⁷₂, NR¹⁷COR¹⁷, NR¹⁷CO₂R¹⁷, CO₂R¹⁷, COR¹⁷, CONR¹⁷₂, S(O)₂R¹⁷, SONR¹⁷₂, S(O)R¹⁷, SO₂NR¹⁷₂, or NR¹⁷S(O)₂R¹⁷, wherein the C₁₋₁₂ alkyl group optionally contains one or

more insertions selected from -O-, -N(R¹²)-, -S-, -S(O)- and -S(O₂)-; and each saturated carbon in the optional fused ring is further optionally and independently substituted by =O, =S, NNR¹⁸₂, =N-OR¹⁸, =NNR¹⁸COR¹⁸, =NNR¹⁸CO₂R¹⁸, =NNSO₂R¹⁸, or =NR¹⁸; and each substitutable nitrogen atom in R⁴ is optionally substituted by R¹⁹, COR¹⁹, SO₂R¹⁹ or CO₂R¹⁹; wherein n is 1 to 6, preferably n is 1, 2 or 3; preferably, wherein each substitutable carbon or hetero-atom in R⁴ is optionally and independently substituted by one or more of C₁₋₆ alkyl, OR²⁰, SR²⁰, NO₂, CN, NR²⁰₂, NR²⁰COR²⁰, NR²⁰CONR²⁰₂, NR²⁰COR²⁰, NHCO₂R²⁰, CO₂R²⁰, COR²⁰, CONR²⁰₂, S(O)₂R²⁰, SONR²⁰₂, S(O)R²⁰, SO₂NR²⁰₂, or NR²⁰S(O)₂R²⁰;

wherein R²⁰ is hydrogen, C₁₋₆ alkyl, or C₁₋₆ haloalkyl;

wherein R¹⁷ is hydrogen, C₁₋₁₂ alkyl, C₃₋₁₂ carbocyclyl or C₃₋₁₂ heterocyclyl, optionally substituted by one or more of C₁₋₆ alkyl, C₃₋₁₂ carbocyclyl, C₃₋₁₂ heterocyclyl, halogen, C₁₋₆ haloalkyl, OR²¹, SR²¹, NO₂, CN, NR²¹R²¹, NR²¹COR²¹, NR²¹CONR²¹R²¹, NR²¹COR²¹, NR²¹CO₂R²¹, CO₂R²¹, COR²¹, CONR²¹₂, S(O)₂R²¹, SONR²¹₂, S(O)R²¹, SO₂NR²¹R²¹, NR²¹S(O)₂R²¹, wherein the C₁₋₁₂ alkyl group optionally incorporates one or two insertions selected from the group consisting of -O-, -N(R²¹)-, -S(O)- and -S(O₂)-, wherein each R²¹ may be the same or different and is as defined below;

wherein two R¹⁷ in NR¹⁷₂ may optionally form a partially saturated, unsaturated or fully saturated three to seven membered ring containing one to three heteroatoms, optionally and independently substituted by one or more of C₁₋₆ alkyl, halogen, C₁₋₆ haloalkyl, OR²¹, SR²¹, NO₂, CN, NR²¹R²¹, NR²¹COR²¹, NR²¹CONR²¹R²¹, NR²¹COR²¹, NR²¹CO₂R²¹, CO₂R²¹, COR²¹, CONR²¹₂, S(O)₂R²¹, SONR²¹₂, S(O)R²¹, SO₂NR²¹R²¹, NR²¹S(O)₂R²¹, wherein the C₁₋₆ alkyl group optionally incorporates one or two insertions selected from the group consisting of -O-, -N(R²¹)-, -S(O)- and -S(O₂)-, wherein each R²¹ may be the same or different and is as defined below;

wherein R¹⁸ is hydrogen, C₁₋₁₂ alkyl, C₃₋₁₂ carbocyclyl or C₃₋₁₂ heterocyclyl, optionally substituted by one or more of C₁₋₆ alkyl, halogen, C₁₋₆ haloalkyl, OR²¹, SR²¹, NO₂, CN, NR²¹R²¹, NR²¹COR²¹, NR²¹CONR²¹R²¹, NR²¹COR²¹, NR²¹CO₂R²¹, CO₂R²¹, COR²¹, CONR²¹₂, S(O)₂R²¹, S(O)R²¹, SO₂NR²¹R²¹, NR²¹S(O)₂R²¹, wherein the C₁₋₁₂ alkyl group optionally incorporates one

or two insertions selected from the group consisting of -O-, -N(R²¹)-, -S(O)- and -S(O₂)-, wherein each R²¹ may be the same or different and is as defined below;

wherein R¹⁹ is hydrogen, C₆₋₁₂ aryl, C₁₋₆ alkyl or C₁₋₆ haloalkyl;

wherein R²¹ is hydrogen, C₁₋₆ alkyl, or C₁₋₆ haloalkyl.

6. (Currently Amended) A compound as claimed in ~~any one of claims 1 to 5~~ claim 1 wherein R¹ is an optionally substituted five or six membered carbocyclyl or heterocyclyl group selected from optionally substituted phenyl, acridine, benzimidazole, benzofuran, benzothiophene, benzoxazole, benzothiazole, cyclohexyl furan, imidazole, indole, isoindole, isoquinoline, isoxazole, isothiazole, morpholine, napthaline, oxazole, phenazine, phenothiazine, phenoxyazine, piperazine, piperidine, pyrazole, pyridazine, pyridine, pyrrole, quinoline, quinolizine, tetrahydrofuran, tetrazine, tetrazole, thiophene, thiazole, thiomorpholine, thianaphthalene, thiopyran, triazine, triazole or trithiane.

7. (Currently Amended) A compound as claimed in ~~any one of claims 1 to 6~~ claim 1 wherein R¹ is a group of formula (II), wherein X is a group NR³, Y is absent and one or more of R² and R³ is hydrogen, alkyl or cycloalkyl.

8. (Original) A compound as claimed in claim 7 wherein the group of formula (II) is an alkylamino or cycloalkylamino group preferably selected from optionally substituted methylamino, ethylamino, propylamino, isopropylamino, butylamino, cyclobutylamino, pentylamino, cyclopentylamino, hexylamino, cyclohexylamino, heptylamino, cycloheptylamino, octylamino and cyclooctylamino.

9. (Currently Amended) A compound as claimed in ~~any one of claims 1 to 8~~ claim 1 wherein R¹ is substituted with one or more of OR²⁴, halogen, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ haloalkyl, C₁₋₆ alkylaryl, C₁₋₆ alkylheterocyclyl, (CH₂)_nOR²⁴, (CH₂)_nNR²⁴₂, SR²⁴, NO₂, CN, NR²⁴₂, CO₂R²⁴, NR²⁴C(O)R²⁴, NR²⁴S(O)₂R²⁴, COR²⁴, CONR²⁴₂, S(O)₂R²⁴, S(O)R²⁴ or SO₂NR²⁴₂;

wherein R²⁴ is hydrogen, C₁₋₄ alkyl or C₆₋₁₂ aryl preferably phenyl, or C₅₋₁₂ heterocyclyl preferably pyridine, and n is 1, 2, 3, 4, 5 or 6;

wherein two R²⁴ in NR²⁴₂ may optionally form a partially saturated, unsaturated or fully saturated three to seven membered ring containing one to three heteroatoms, said ring is preferably independently substituted with one or more of halogen, C₁₋₁₂ alkyl, C₂₋₁₂ alkenyl, C₂₋₁₂ alkynyl, C₁₋₁₂ haloalkyl, C₃₋₁₂ carbocyclyl, C₃₋₁₂ heterocyclyl, OR²⁵, SR²⁵, NO₂, CN, NR²⁵₂, NR²⁵COR²⁵, NR²⁵CONR²⁵₂, NR²⁵COR²⁵, NR²⁵CO₂R²⁵, CO₂R²⁵, COR²⁵, CONR²⁵₂, S(O)₂R²⁵, SONR²⁵₂, S(O)R²⁵, SO₂NR²⁵₂, or NR²⁵S(O)₂R²⁵; and each saturated carbon in the optional ring is further optionally and independently substituted by =O, =S, NNR²⁶₂, =N-OR²⁶, =NNR²⁶COR²⁶, =NNR²⁶CO₂R²⁶, =NNSO₂R²⁶, or =NR²⁶; and each substitutable nitrogen atom is optionally substituted by R²⁷, COR²⁷, SO₂R²⁷ or CO₂R²⁷;

wherein R²⁵ is hydrogen, C₁₋₁₂ alkyl, C₆₋₁₂ carbocyclyl or C₅₋₁₂ heterocyclyl, optionally substituted by one or more of C₁₋₆ alkyl, halogen, C₁₋₆ haloalkyl, OR²⁸, SR²⁸, NO₂, CN, NR²⁸R²⁸, NR²⁸COR²⁸, NR²⁸CONR²⁸R²⁸, NR²⁸COR²⁸, NR²⁸CO₂R²⁸, CO₂R²⁸, COR²⁸, CONR²⁸₂, S(O)₂R²⁸, SONR²⁸₂, S(O)R²⁸, SO₂NR²⁸R²⁸, NR²⁸S(O)₂R²⁸, wherein the C₁₋₁₂ alkyl group optionally incorporates one or two insertions selected from the group consisting of -O-, -N(R²⁸)-, -S(O)- and -S(O₂)-, wherein each R²⁸ may be the same or different and is as defined below;

wherein R²⁶ is hydrogen, C₁₋₁₂ alkyl, C₆₋₁₂ carbocyclyl or C₅₋₁₂ heterocyclyl, optionally substituted by one or more of C₁₋₆ alkyl, halogen, C₁₋₆ haloalkyl, OR²⁸, SR²⁸, NO₂, CN, NR²⁸R²⁸, NR²⁸COR²⁸, NR²⁸CONR²⁸R²⁸, NR²⁸COR²⁸, NR²⁸CO₂R²⁸, CO₂R²⁸, COR²⁸, CONR²⁸₂, S(O)₂R²⁸, S(O)R²⁸, SO₂NR²⁸R²⁸, NR²⁸S(O)₂R²⁸, wherein the C₁₋₁₂ alkyl group optionally incorporates one or two insertions selected from the group consisting of -O-, -N(R²⁸)-, -S(O)- and -S(O₂)-, wherein each R²⁸ may be the same or different and is as defined below;

wherein R²⁷ is hydrogen, C₁₋₆ alkyl, C₁₋₆ haloalkyl or C₆₋₁₂ aryl;

wherein R²⁸ is hydrogen, C₁₋₆ alkyl, or C₁₋₆ haloalkyl.

10. (Currently Amended) A compound as claimed in ~~any one of claims 1 to 9~~ claim 1 wherein R⁴ is selected from phenyl, cyclohexyl, acridine, benzimidazole, benzofuran,

benzothiophene, benzoxazole, benzothiazole, indole, isoindole, indolizine, indazole, isoindole, isoquinoline, morpholine, naphthalene, phenazine, phenothiazine, phenoxazine, piperazine, piperidine, pyridazine, pyridine, pyridinyl, pyrimidinyl, pyrazinyl, pyridazinyl, quinoline, quinolizine, tetrazine, thiomorpholine, thianaphthalene, thiopyran, triazine, trithiane, furan, imidazole, isoxazole, isothiazole, oxazole, oxadiazole, oxathiazole, pyrazole, pyrrole, tetrazole, thiophene, thiadiazole, thiatriazole, thiazole or triazole, wherein each substitutable carbon or hetero-atom in R⁴ is optionally and independently substituted by one or more of C₁₋₆ alkyl, OR²⁰, SR²⁰, NO₂, CN, NR²⁰₂, NR²⁰COR²⁰, NR²⁰CONR²⁰₂, NR²⁰COR²⁰, NHCO₂R²⁰, CO₂R²⁰, COR²⁰, CONR²⁰₂, S(O)₂R²⁰, SONR²⁰₂, S(O)R²⁰, SO₂NR²⁰₂, or NR²⁰S(O)₂R²⁰;

wherein R²⁰ is hydrogen, C₁₋₆ alkyl, or C₁₋₆ haloalkyl.

11. (Currently Amended) A compound as claimed in ~~any one of claims 1 to 10~~ claim 1 wherein R⁴ is a six-membered carbocyclyl or heterocyclyl group optionally substituted with one or more of OR²⁹, NR²⁹₂, SR²⁹, (CH₂)_nOR²⁹, (CH₂)_nNR²⁹₂, halogen, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, haloalkyl, NO₂, CN, NR²⁹C(O)R²⁹, NR²⁹S(O)₂R²⁹, CO₂R²⁹, COR²⁹, CONR²⁹₂, S(O)₂R²⁹, S(O)R²⁹ or SO₂NR²⁹₂;

wherein R²⁹ is hydrogen, C₁₋₄ alkyl, C₅₋₁₂ heterocyclyl or C₆₋₁₂ aryl preferably phenyl, and n is 1, 2, 3, 4, 5 or 6;

wherein two R²⁹ in NR²⁹₂ may optionally form a partially saturated, unsaturated or fully saturated five to seven membered ring containing one to three heteroatoms, optionally and independently substituted with one or more of halogen, C₁₋₁₂ alkyl, C₂₋₁₂ alkenyl, C₂₋₁₂ alkynyl, C₁₋₁₂ haloalkyl, C₆₋₁₂ carbocyclyl, C₅₋₁₂ heterocyclyl, OR³⁰, SR³⁰, NO₂, CN, NR³⁰₂, NR³⁰COR³⁰, NR³⁰CONR³⁰₂, NR³⁰COR³⁰, NR³⁰CO₂R³⁰, CO₂R³⁰, COR³⁰, CONR³⁰₂, S(O)₂R³⁰, SONR³⁰₂, S(O)R³⁰, SO₂NR³⁰₂, or NR³⁰S(O)₂R³⁰; and each saturated carbon in the optional ring is further optionally and independently substituted by =O, =S, NNR³¹₂, =N-OR³¹, =NNR³¹COR³¹, =NNR³¹CO₂R³¹, =NNSO₂R³¹, or =NR³¹; and each substitutable nitrogen atom is optionally substituted by R³², COR³², SO₂R³² or CO₂R³²;

wherein R³⁰ is hydrogen, C₁₋₁₂ alkyl, C₆₋₁₂ carbocyclyl or C₅₋₁₂ heterocyclyl, optionally substituted by one or more of C₁₋₆ alkyl, halogen, C₁₋₆ haloalkyl, OR³³, SR³³, NO₂, CN, NR³³R³³,

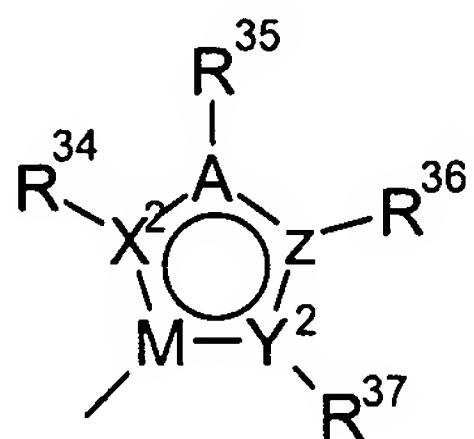
$\text{NR}^{33}\text{COR}^{33}$, $\text{NR}^{33}\text{CONR}^{33}\text{R}^{33}$, $\text{NR}^{33}\text{COR}^{33}$, $\text{NR}^{33}\text{CO}_2\text{R}^{33}$, CO_2R^{33} , COR^{33} , CONR^{33}_2 , $\text{S(O)}_2\text{R}^{33}$, SONR^{33}_2 , S(O)R^{33} , $\text{SO}_2\text{NR}^{33}\text{R}^{33}$, $\text{NR}^{33}\text{S(O)}_2\text{R}^{33}$, wherein the C_{1-12} alkyl group optionally incorporates one or two insertions selected from the group consisting of -O-, -N(R^{33})-, -S(O)- and -S(O_2)-, wherein each R^{33} may be the same or different and is as defined below;

wherein R^{31} is hydrogen, C_{1-12} alkyl, C_{6-12} carbocyclyl or C_{5-12} heterocyclyl, optionally substituted by one or more of C_{1-6} alkyl, halogen, C_{1-6} haloalkyl, OR^{33} , SR^{33} , NO_2 , CN , $\text{NR}^{33}\text{R}^{33}$, $\text{NR}^{33}\text{COR}^{33}$, $\text{NR}^{33}\text{CONR}^{33}\text{R}^{33}$, $\text{NR}^{33}\text{COR}^{33}$, $\text{NR}^{33}\text{CO}_2\text{R}^{33}$, CO_2R^{33} , COR^{33} , CONR^{33}_2 , $\text{S(O)}_2\text{R}^{33}$, S(O)R^{33} , $\text{SO}_2\text{NR}^{33}\text{R}^{33}$, $\text{NR}^{33}\text{S(O)}_2\text{R}^{33}$, wherein the C_{1-12} alkyl group optionally incorporates one or two insertions selected from the group consisting of -O-, -N(R^{33})-, -S(O)- and -S(O_2)-, wherein each R^{21} may be the same or different and is as defined below;

wherein R^{32} is hydrogen, C_{6-12} aryl, C_{1-6} alkyl or C_{1-6} haloalkyl;

wherein R^{33} is hydrogen, C_{1-6} alkyl, or C_{1-6} haloalkyl.

12. (Currently Amended) A compound as claimed in ~~any one of claims 1 to 11~~ claim 1 wherein R^4 is a five-membered heterocyclyl,



wherein A, X^2 , Y^2 or Z are independently selected from N, O, C, S and M is C or N, wherein one, two, three or four of A, X^2 , Y^2 , Z and M is other than C;

R^{34} , R^{35} , R^{36} or R^{37} are independently selected from a lone electron pair, hydrogen, halogen, C_{1-12} alkyl, C_{1-12} haloalkyl, OR^{38} , SR^{38} , NO_2 , CN , NR^{38}_2 , $\text{NR}^{38}\text{COR}^{38}$, $\text{NR}^{38}\text{CONR}^{38}_2$, $\text{NR}^{38}\text{COR}^{38}$, $\text{NR}^{38}\text{CO}_2\text{R}^{38}$, $(\text{CH}_2)_n\text{OR}^{38}$, $(\text{CH}_2)_n\text{NR}^{38}_2$, CO_2R^{38} , COR^{38} , CONR^{38}_2 , $\text{S(O)}_2\text{R}^{38}$, SONR^{38}_2 , S(O)R^{38} , $\text{SO}_2\text{NR}^{38}_2$, or $\text{NHS(O)}_2\text{R}^{38}$;

wherein n is 1 to 6, preferably n is 1, 2 or 3;

or wherein any two of R³⁴, R³⁵, R³⁶ or R³⁷ may optionally form a partially saturated, unsaturated or fully saturated five to seven membered ring containing zero to three heteroatoms, each saturated carbon in the optional fused ring is further optionally and independently substituted with one or more of halogen, C₁₋₁₂ alkyl, C₂₋₁₂ alkenyl, C₂₋₁₂ alkynyl, C₁₋₁₂ haloalkyl, C₆₋₁₂ carbocyclyl, C₅₋₁₂ heterocyclyl, OR³⁸, SR³⁸, NO₂, CN, NR³⁸₂, NR³⁸CONR³⁸₂, NR³⁸COR³⁸, NR³⁸CO₂R³⁸, (CH₂)_nOR³⁸, (CH₂)_nNR³⁸₂, CO₂R³⁸, COR³⁸, CONR³⁸₂, S(O)₂R³⁸, SONR³⁸₂, S(O)R³⁸, SO₂NR³⁸₂, or NR³⁸S(O)₂R³⁸; and each saturated carbon in the optional fused ring is further optionally and independently substituted by =O, =S, NNR³⁹₂, =N-OR³⁹, =NNR³⁹COR³⁹, =NNR³⁹CO₂R³⁹, =NNSO₂R³⁹, or =NR³⁹; and each substitutable nitrogen atom in R⁴ is optionally substituted by R⁴⁰, COR⁴⁰, SO₂R⁴⁰ or CO₂R⁴⁰;

wherein n is 1 to 6, preferably n is 1, 2 or 3;

wherein R³⁸ is hydrogen, C₁₋₁₂ alkyl, C₆₋₁₂ carbocyclyl or C₅₋₁₂ heterocyclyl, optionally substituted by one or more of C₁₋₆ alkyl, halogen, C₁₋₆ haloalkyl, OR⁴¹, SR⁴¹, NO₂, CN, NR⁴¹R⁴¹, NR⁴¹CONR⁴¹R⁴¹, NR⁴¹COR⁴¹, NR⁴¹CO₂R⁴¹, CO₂R⁴¹, COR⁴¹, CONR⁴¹₂, S(O)₂R⁴¹, SONR⁴¹₂, S(O)R⁴¹, SO₂NR⁴¹R⁴¹, NR⁴¹S(O)₂R⁴¹, wherein the C₁₋₁₂ alkyl group optionally incorporates one or two insertions selected from the group consisting of -O-, -N(R⁴¹)-, -S(O)- and -S(O₂)-, wherein each R⁴¹ may be the same or different and is as defined below;

wherein R³⁹ is hydrogen, C₁₋₁₂ alkyl, carbocyclyl or heterocyclyl, optionally substituted by one or more of C₁₋₆ alkyl, halogen, C₁₋₆ haloalkyl, OR⁴¹, SR⁴¹, NO₂, CN, NR⁴¹R⁴¹, NR⁴¹COR⁴¹, NR⁴¹CONR⁴¹R⁴¹, NR⁴¹COR⁴¹, NR⁴¹CO₂R⁴¹, CO₂R⁴¹, COR⁴¹, CONR⁴¹₂, S(O)₂R⁴¹, S(O)R⁴¹, SO₂NR⁴¹R⁴¹, NR⁴¹S(O)₂R⁴¹, wherein the C₁₋₁₂ alkyl group optionally incorporates one or two insertions selected from the group consisting of -O-, -N(R⁴¹)-, -S(O)- and -S(O₂)-, wherein each R⁴¹ may be the same or different and is as defined below;

wherein R⁴⁰ is hydrogen, C₁₋₆ alkyl, C₁₋₆ haloalkyl or C₆₋₁₂ aryl.

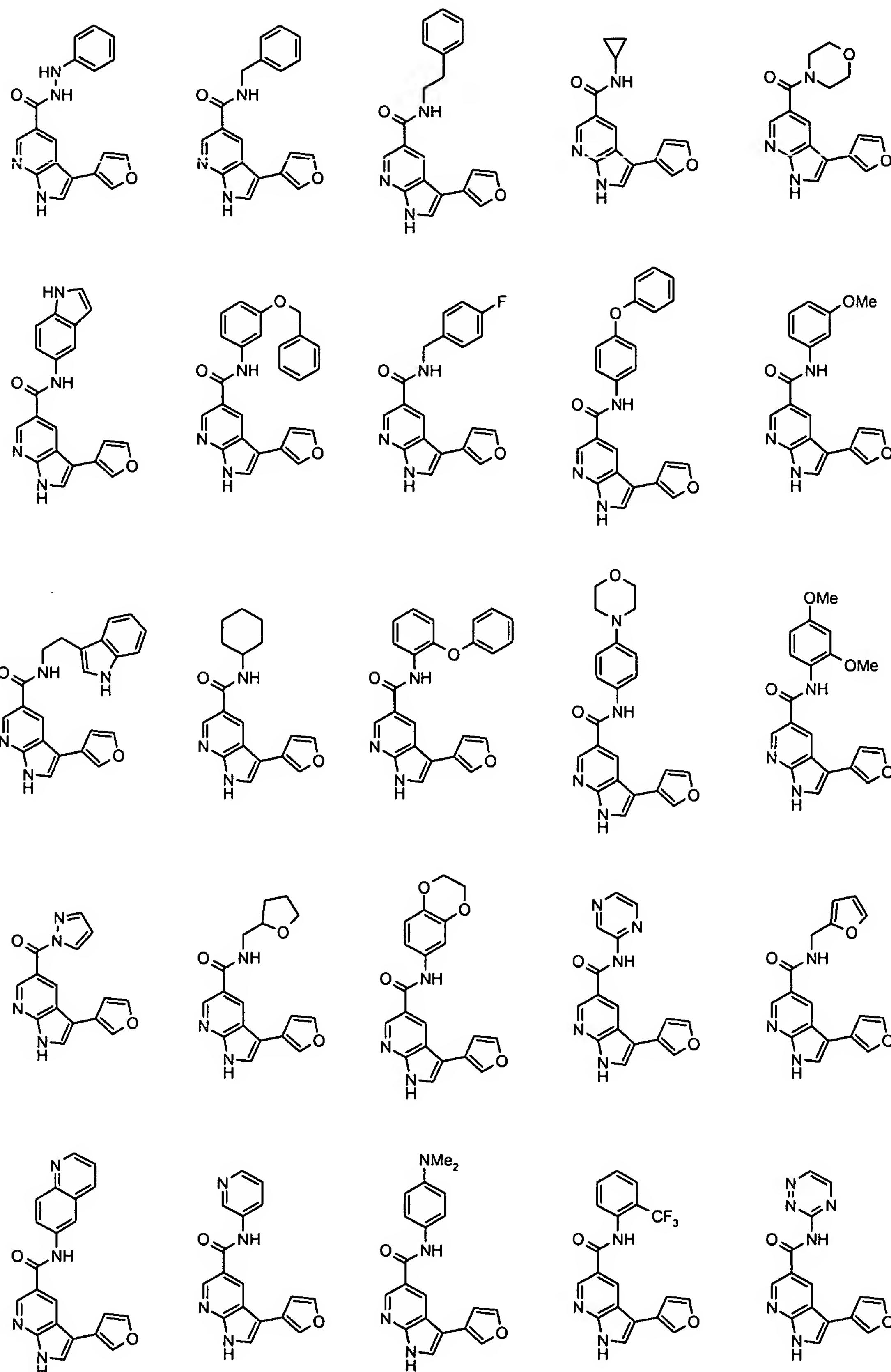
wherein R⁴¹ is hydrogen, C₁₋₆ alkyl, or C₁₋₆ haloalkyl.

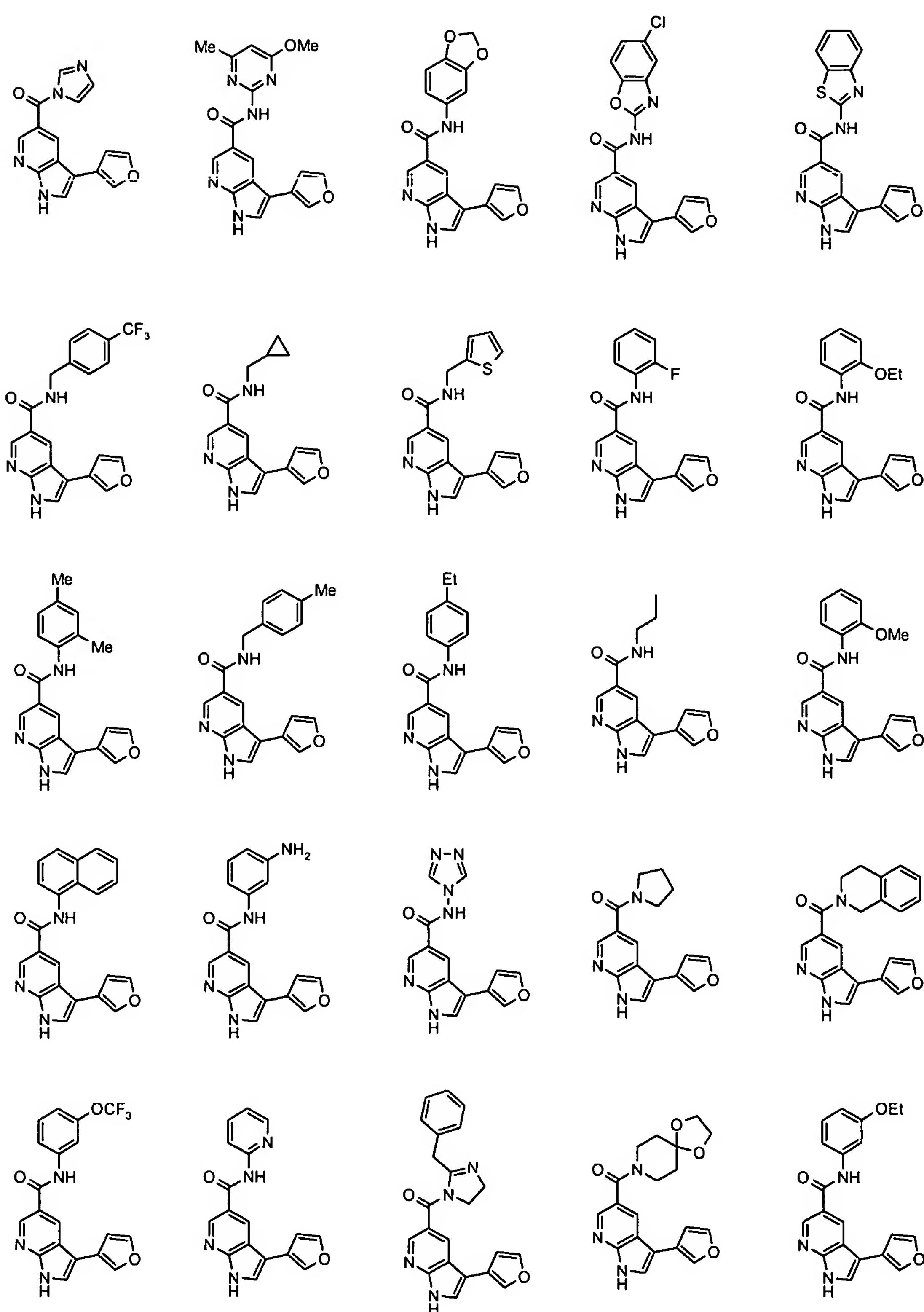
13. (Original) A compound as claimed in claim 12 wherein R⁴ is furan, imidazole, isoxazole, isothiazole, oxazole, oxadiazole, oxatriazole, pyrazole, pyrrole, tetrazole, thiophene, thiadiazole,

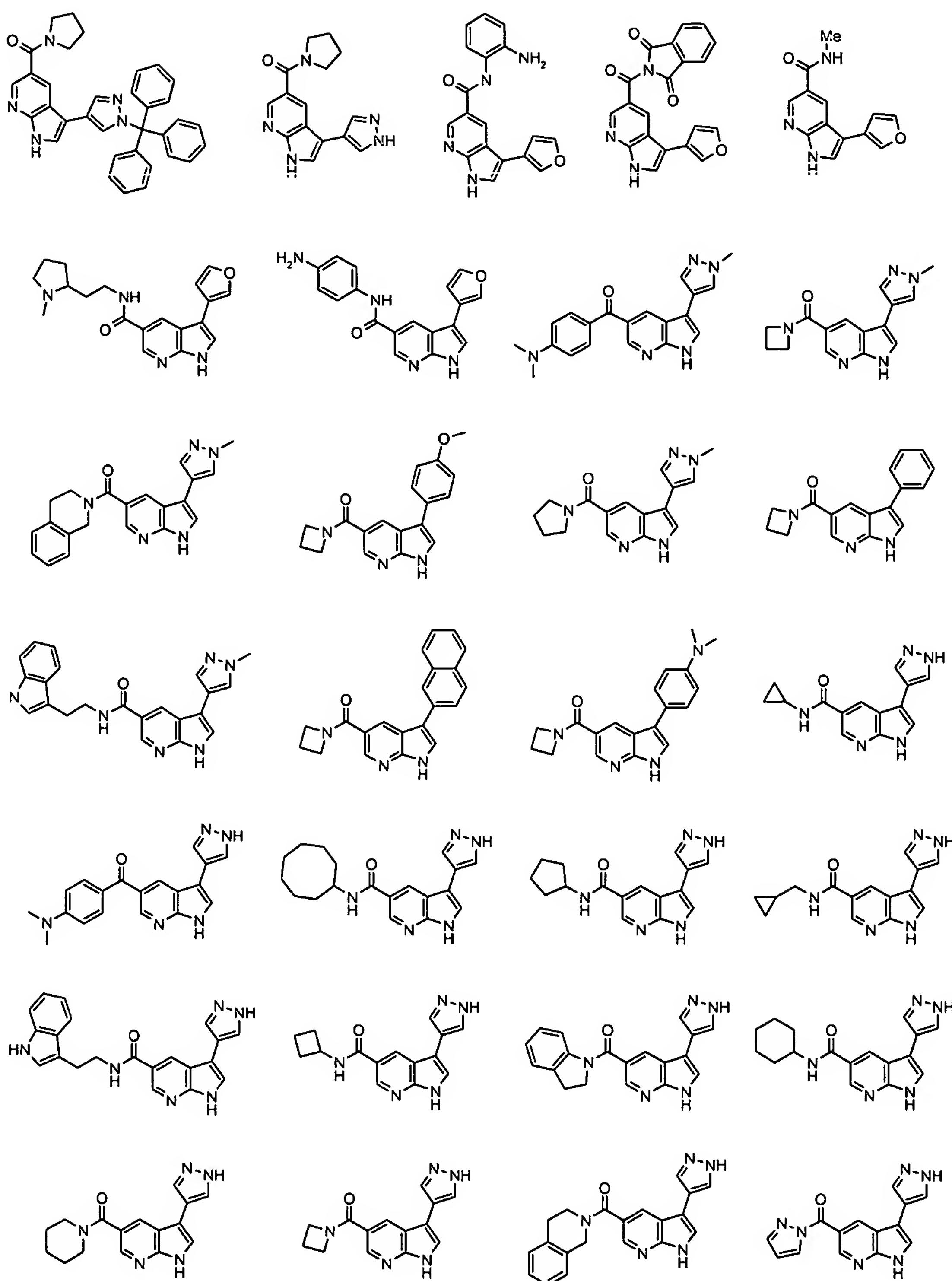
thiatriazole, thiazole or triazole; and R³⁴, R³⁵, R³⁶ or R³⁷ are independently selected from a lone electron pair, hydrogen, halogen, C₁₋₆ alkyl, C₁₋₆ haloalkyl, OR⁴², SR⁴², CN, NR⁴²₂, NR⁴²COR⁴², CO₂R⁴², COR⁴², CONR⁴²₂, S(O)₂R⁴², or S(O)R⁴²;

wherein R⁴² is hydrogen, C₁₋₄ alkyl, preferably methyl or ethyl or carbocyclyl, preferably phenyl.

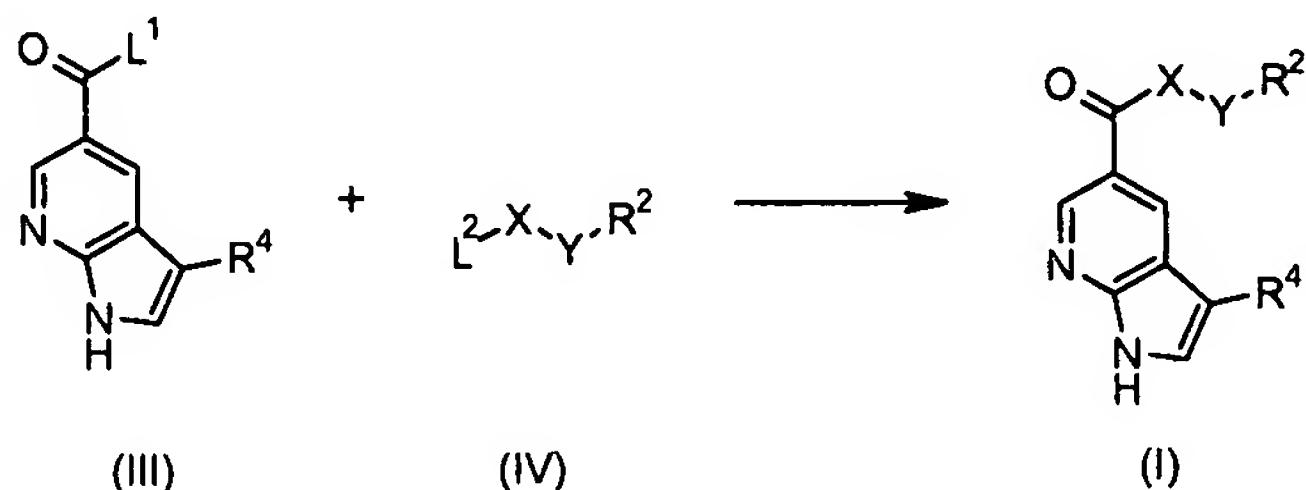
14. (Currently Amended) A compound as claimed ~~in any one of claims 1 to 13~~ claim 1 selected from the group consisting of:







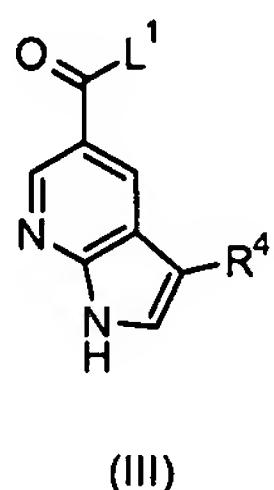
15. (Currently Amended) A process for the manufacture of a compound of formula (I) wherein R¹ is a group of formula (II) as defined in ~~the any one of claims 1 to 14~~ claim 1 of the invention comprising the condensation of an intermediate (III) with an intermediate (IV).



wherein R² and R⁴ are as defined in any one of claims 1 to 14; and wherein each of L¹ and L² is independently a leaving group wherein L¹ and L² together form a condensation product.

16. (Original) A process as claimed in claim 15 wherein L¹ is OH, OR⁵⁰, OM, Cl, Br or I wherein R⁵⁰ is C₁₋₆ alkyl, preferably methyl or ethyl and M is Na, Li, K, Ca, Mg or Ba, and L² is hydrogen or M.

17. (Original) A compound of formula (III)



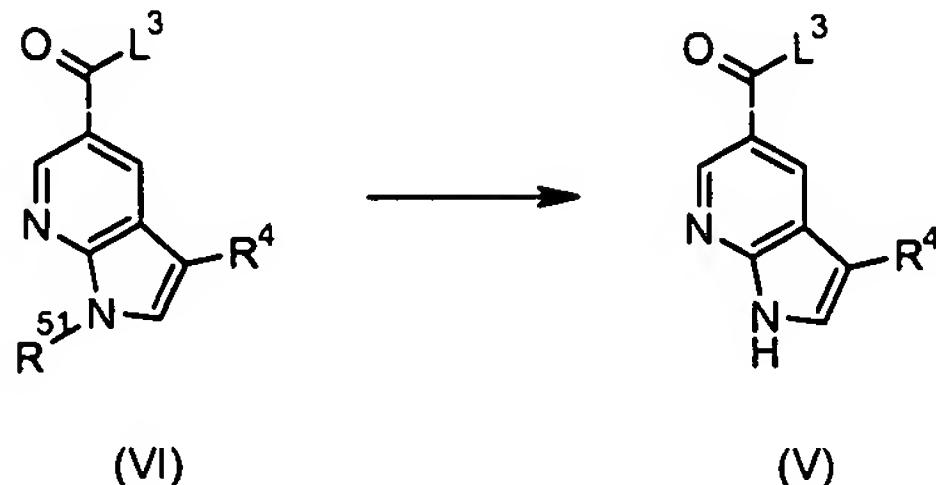
wherein R⁴ is as defined any one of claims 1 to 14

L¹ is OH, OR⁵⁰, OM, Cl, Br, or I

R⁵⁰ is C₁₋₆ alkyl, and

M is Na, Li, K, Ca, Mg, or Ba.

18. (Original) A process for the manufacture of a compound of formula (V) comprising removal of group R^{51} from an intermediate (VI)



wherein L^3 is R^1 or L^1 ;

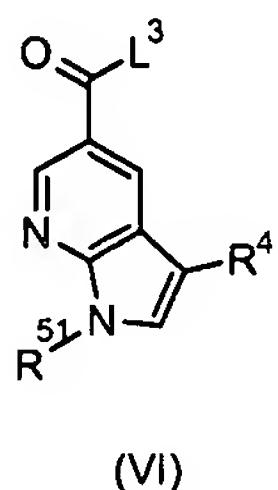
R¹ and R⁴ are as defined in any one of claims 1 to 14;

L^1 is as defined in claim 17;

and R⁵¹ is an amino protecting group selected from R⁵²SO₂, R⁵²C(O), R⁵²₃Si, R⁵²OCH₂, (R⁵²)₂NSO₂, (R⁵²)₂NC(O), R⁵²OC(O), R⁵²(R⁵²O)CH, R⁵²CH₂CH₂, R⁵²CH₂, PhC(O)CH₂, CH₂=CH, ClCH₂CH₂, Ph₃C, Ph₂(4-pyridyl)C, Me₂N, HO-CH₂, R⁵²OCH₂, (R⁵²)₃SiOCH₂, (R⁵²O)₂CH, t-BuOC(O)CH₂, Me₂NCH₂, and tetrahydropyranylamine,

wherein R⁵² is C₁₋₆ alkyl or C₆₋₁₂ aryl.

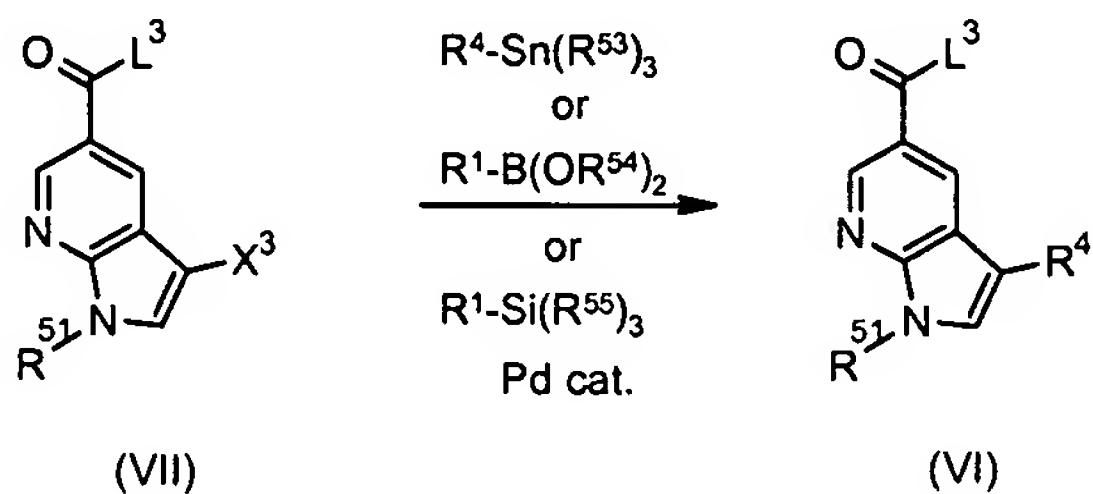
19. (Original) A compound of formula (VI)



wherein R⁴ is as defined in any one of claims 1 to 14, and

wherein L³ and R⁵¹ are as defined in claim 18.

20. (Currently Amended) A process for the manufacture of a compound of formula (VI) comprising a a) a reaction of a compound of formula (VII) with stannane $R^4\text{-Sn}(R^{53})_3$ in the presence of a palladium catalyst or b) reaction of a compound of formula (VII) with boronic acid or ester $R^4\text{-B(OR}^{54}\text{)}_2$ in a presence of a suitable palladium catalyst or c) reaction of a compound of formula (VII) with silane $R^4\text{-Si}(R^{55})_3$ in the presence of a palladium catalyst;



wherein R⁴ is as defined in any one of claims 1 to 14,

L^3 is as defined in claim 18;

R^{51} is an amino protecting group as defined in claim 18;

X^3 is F, Cl, Br I or CF_3SO_3 ,

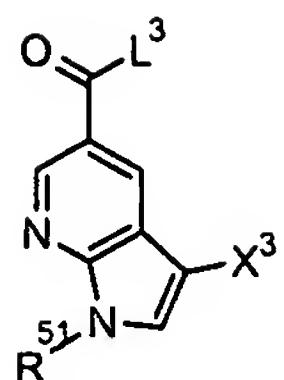
and R⁵³ is independently C₁₋₆ alkyl;

R^{54} is independently hydrogen or C₁₋₆ alkyl or wherein two R⁵⁴ groups together optionally form a five, six or seven membered ring with the boron and oxygen atoms, wherein the ring is optionally substituted with one or more C₁₋₆ alkyl group.

and R⁵⁵ is independently C₁₋₆ alkyl, F, or OH.

21. (Original) A process as claimed in claim 20 wherein the catalyst is one or more selected from $(PPh_3)_2PdCl_2$, $(PPh_3)_4Pd$, $Pd(OAc)_2$, $[PdCl(\eta^3-C_3H_5)]_2$, $Pd_2(dba)_3$, $Pd(dba)_2$ ($dba =$ dibenzylideneacetone), and $Pd/P(t-Bu)_3$.

22. (Original) A compound of formula (VII)



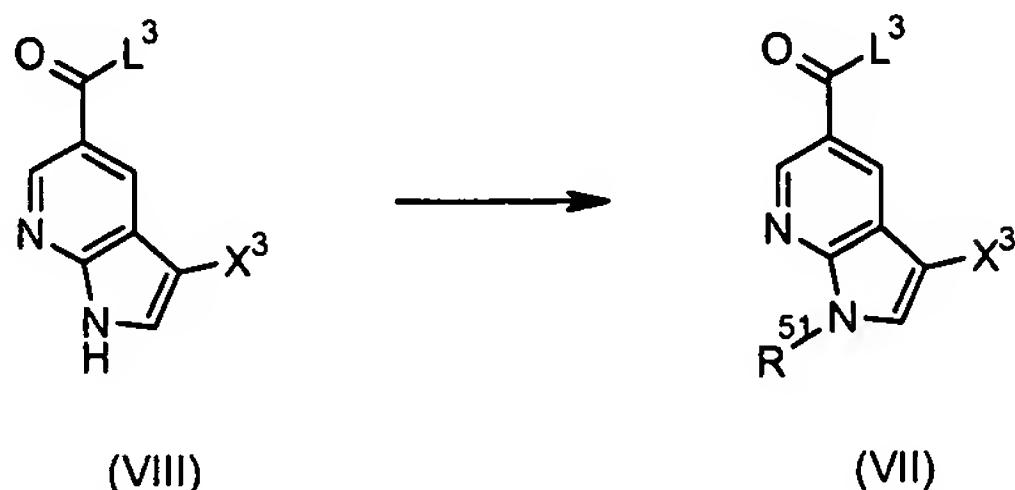
(VII)

wherein L^3 is as defined in claim 18;

wherein R^{51} is an amino protecting group as defined in claim 18;

wherein X^3 is as defined in claim 20.

23. (Original) A process for the manufacture of a compound of formula (VII) comprising protection of the pyrrole nitrogen with a group R^{51} ,

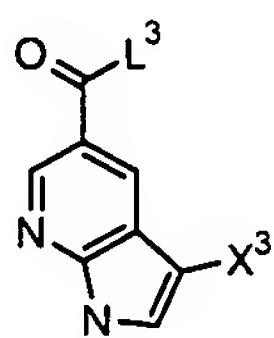


wherein L^3 is as defined in claim 18;

wherein R^{51} is an amino protecting group defined in claim 18;

wherein X^3 is as defined in claim 20.

24. (Original) A compound of formula (VIII)

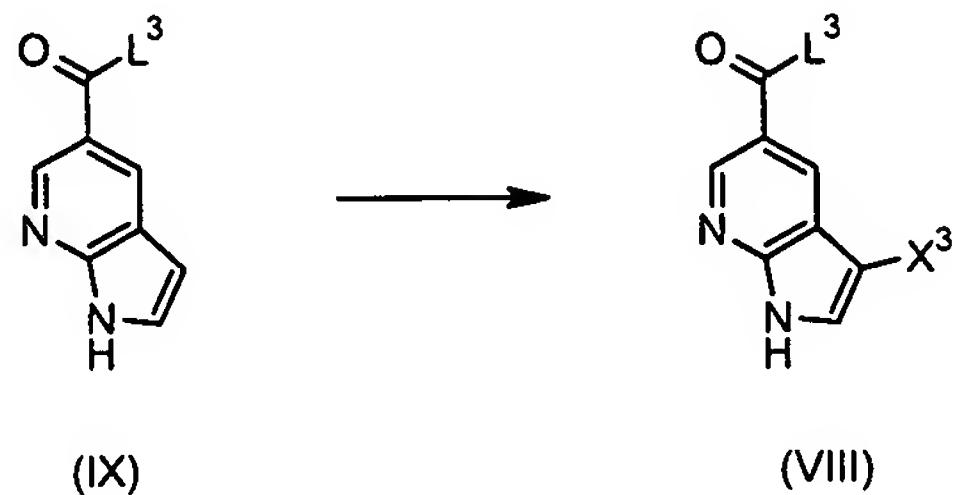


(VIII)

wherein L^3 is as defined in claim 18;

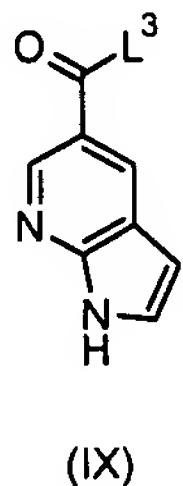
and X^3 is as defined in claim 20.

25. (Original) A process for the production of a compound of formula (VIII) by the introduction of an X^3 group into a compound of formula (IX)

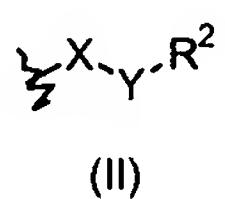


wherein L³ is as defined in claim 18 and X³ is as defined in claim 20.

26. (Currently Amended) A compound of formula (IX)

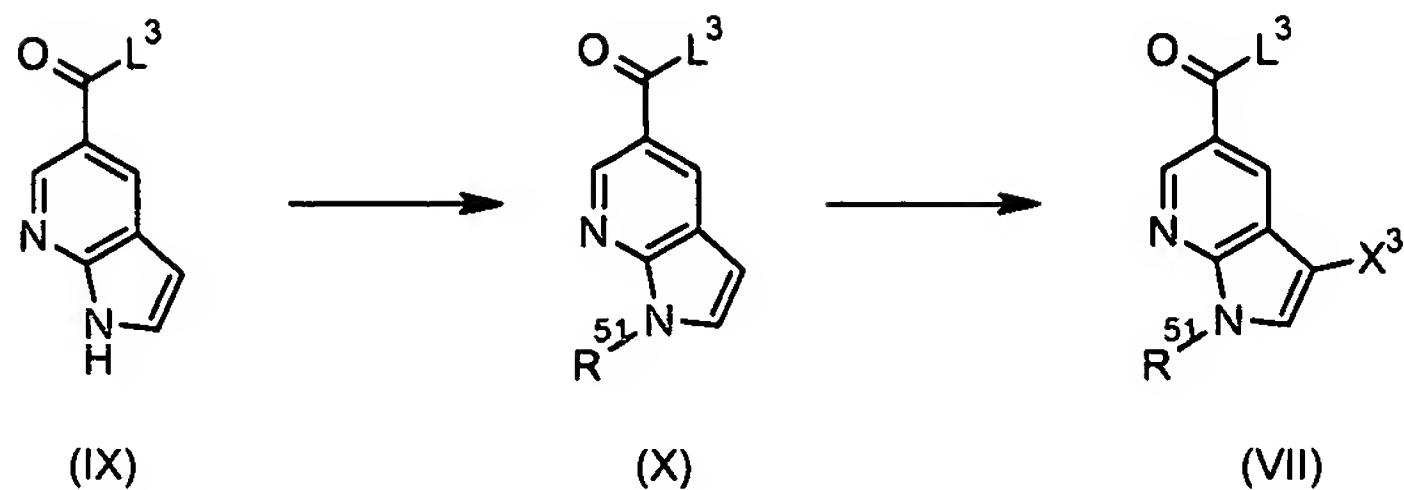


wherein L^3 is a group L^1 as defined in claim 17 or a group R^1 , wherein R^1 is a group of formula (II)



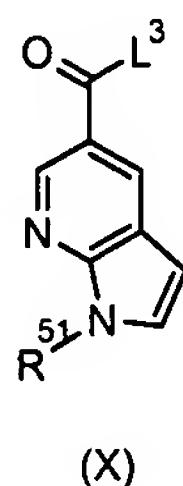
wherein X is NR³, O, S or (CR²²R²²)_n, Y is absent or is NR²³, O, or (CR²³R²³)_n, R² is optionally substituted C₁₋₁₂ alkyl, C₂₋₁₂ alkenyl, C₂₋₁₂ alkynyl, C₃₋₁₂ carbocyclyl or C₃₋₁₂ heterocyclyl as claimed defined in any one of claims 1 to 14.

27. (Original) A process for the production of a compound of formula (VII) by the introduction of a X^3 group to a compound of formula (X)

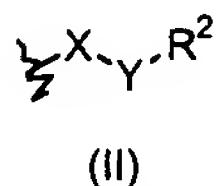


wherein L³ and R⁵¹ are as defined in claim 18 and X³ is as defined in claim 20.

28. (Currently Amended) A compound of formula (X)



wherein L^3 is a group L^1 as defined in claim 17 or a group R^1 , wherein R^1 is a group of formula (II)



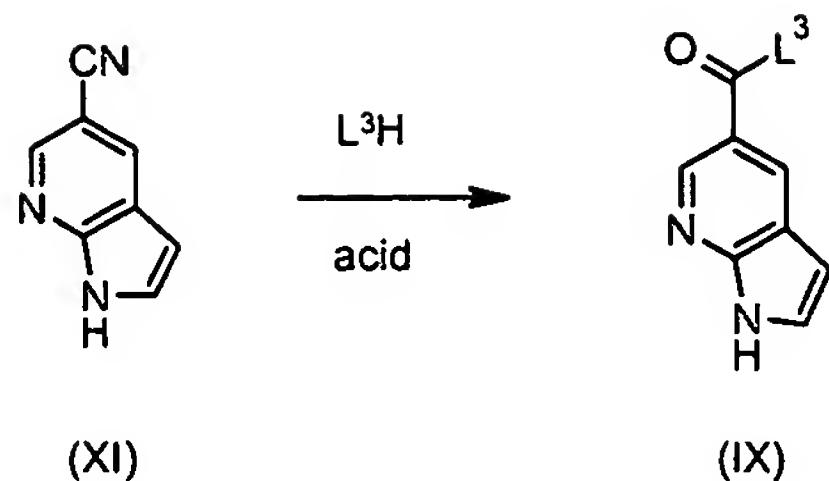
wherein X is NR³, O, S or (CR²²R²²)_n, Y is absent or is NR²³, O, or (CR²³R²³)_n, R² is optionally substituted C₁₋₁₂ alkyl, C₂₋₁₂ alkenyl, C₂₋₁₂ alkynyl, C₃₋₁₂ carbocyclyl or C₃₋₁₂ heterocyclyl as claimed defined in any one of claims 1 to 14;

and R⁵¹ is an amino protecting group as defined in claim 18.

29. (Original) A process for the preparation of compound of formula (IX) by the acid-catalysed hydrolysis of nitrile (XI) in the presence of an alcohol,

Date of Deposit: Sept. 1, 2006

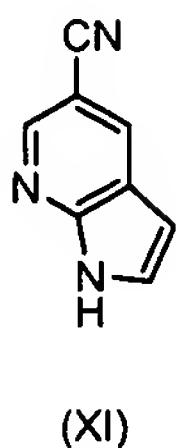
Atty. Docket No. 102286-00167 US1



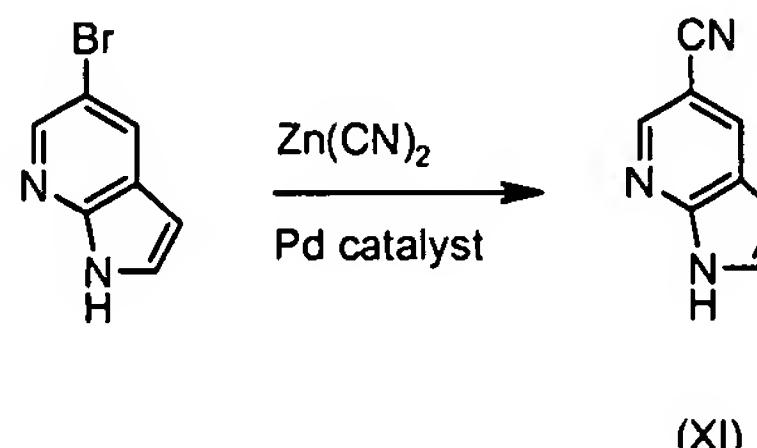
wherein L³ is OR^{50;}

and R^{50} is as defined in claim 16.

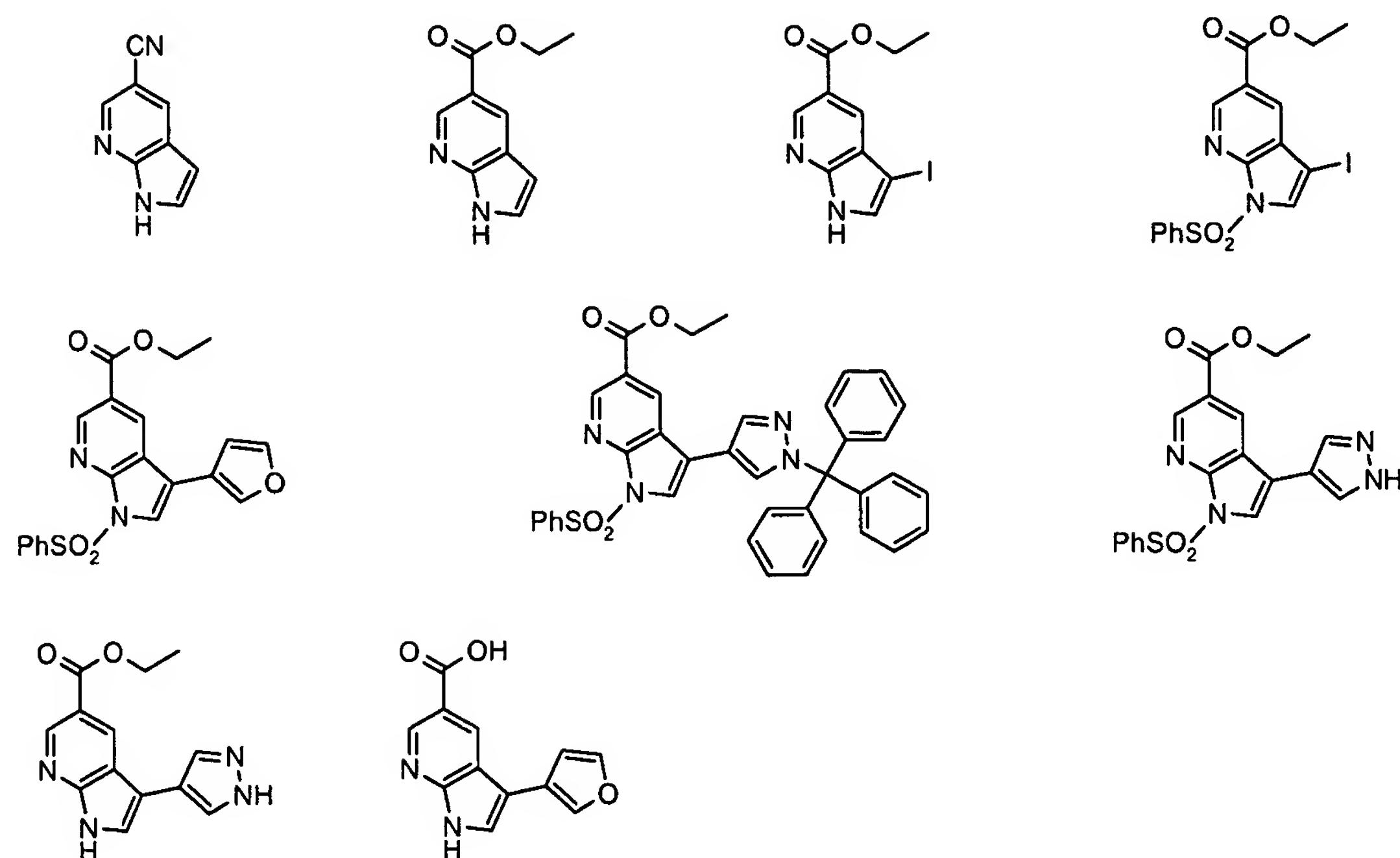
30. (Original) A compound of formula (XI)



31. (Original) A process for the production of 1*H*-Pyrrolo[2,3-*b*]pyridine-5-carbonitrile (XI) comprising reaction of 5-bromo-1*H*-pyrrolo[2,3-*b*]pyridine with Zn(CN)₂ in the presence of a palladium catalyst.



32. (Currently Amended) A compound as claimed in any one of claims 17, 19, 22, 24, 26, 28 or 30 selected from ~~one or more~~ of the group consisting of:



33. (Canceled)

34. (Currently Amended) A pharmaceutical composition comprising a compound as claimed in ~~any one of claims 1 to 14~~ claim 1 in combination with a pharmaceutically acceptable carrier, diluent or excipient.

35. (Original) A composition as claimed in claim 34, additionally comprising one or more of an anti-inflammatory agent, an AMPA receptor antagonist, a chemotherapeutic agent and/or an antiproliferative agent.

36. (Canceled)

37. (Canceled)

38. (Canceled)

39. (Canceled)

40. (Canceled)

41. (Canceled)

42. (Canceled)

43. (Canceled)

44. (Canceled)

45. (Canceled)

46. (Currently Amended) A method of treating or preventing a -mediated disorder in an individual, which method comprises administering to said individual a compound as claimed in ~~any of claims 1-14~~ claim 1 or a composition as claimed in ~~any of~~ claims 34 or 35.

47. (Canceled)

48. (Currently Amended) A method as claimed in claim 46 ~~or 47~~, wherein the disorder is a neurodegenerative disorder, inflammatory disease, a disorder linked to apoptosis, particularly neuronal apoptosis, autoimmune disease, destructive bone disorder, proliferative disorder, cancer, infectious disease, allergy, ischemia reperfusion injury, heart attack, angiogenic disorder, organ hypoxia, vascular hyperplasia, cardiac hypertrophy, thrombin induced platelet aggregation and/or any condition associated with prostaglandin endoperoxidase synthase-2.

49. (Original) A method as claimed in claim 48, wherein the neurodegenerative disorder results from apoptosis and/or inflammation.

50. (Currently Amended) A method as claimed in claim 48 ~~or 49~~, wherein the neurodegenerative disorder is: dementia; Alzheimer's disease; Parkinson's disease; Amyotrophic Lateral Sclerosis; Huntington's disease; senile chorea; Sydenham's chorea; hypoglycemia; head and spinal cord trauma including traumatic head injury; acute and chronic pain; epilepsy and seizures; olivopontocerebellar dementia; neuronal cell death; hypoxia-related neurodegeneration; acute hypoxia; glutamate toxicity including glutamate neurotoxicity; cerebral ischemia; dementia linked to meningitis and/or neurosis; cerebrovascular dementia; or dementia in an HIV-infected patient.

51. (Currently Amended) A method as claimed in claim 48 ~~or 49~~, wherein the neurodegenerative disorder is a peripheral neuropathy, including mononeuropathy, multiple mononeuropathy or polyneuropathy, such as may be found in diabetes mellitus, Lyme disease or uremia; peripheral neuropathy caused by a toxic agent; demyelinating disease such as acute or chronic inflammatory polyneuropathy, leukodystrophies or Guillain-Barré syndrome; multiple mononeuropathy secondary to a collagen vascular disorder; multiple mononeuropathy secondary to sarcoidosis; multiple mononeuropathy secondary to a metabolic disease, or multiple mononeuropathy secondary to an infectious disease.

52. (Currently Amended) A method as claimed in claim 46, ~~47 or 48~~, wherein the disorder is inflammatory bowel disorder; bronchitis; asthma; acute pancreatitis; chronic pancreatitis; allergies of various types; Alzheimer's disease; autoimmune disease such as rheumatoid arthritis, systemic lupus erythematosus, glomerulonephritis, scleroderma, chronic thyroiditis, Graves's disease, autoimmune gastritis, diabetes, autoimmune haemolytic anaemia, autoimmune neutropaenia, thrombocytopenia, atopic dermatitis, chronic active hepatitis, myasthenia gravis, multiple sclerosis, ulcerative colitis, Crohn's disease, psoriasis or graft vs host disease.

53. (Currently Amended) A method as claimed in ~~any of claims 46-52~~, claim 46, wherein one or more other active agent is administered to the individual simultaneously, subsequently or sequentially to administering the compound.

54. (Original) A method as claimed in claim 53, wherein the other active agent is an anti-inflammatory agent.

55. (Canceled)

56. (Canceled)

57. (Canceled)

58. (Canceled)

59. (Canceled)

60. (Canceled)

61. (Canceled)

62. (Canceled)

63. (Currently Amended) An assay for determining the activity of the compounds as defined in ~~any of claims 1-14, claim 1,~~ comprising providing a system for assaying the activity and assaying the activity of a compound as defined in ~~any of claims 1-14~~ claim 1.

64. (Original) An assay as claimed in claim 63, wherein the assay is for the JNK inhibiting activity of the compound, preferably for the JNK3-specific inhibiting activity of the compound.

65. (Currently Amended) An assay as claimed in claim 63 or 64, wherein the assay is a Scintillation Proximity Assay (SPA) using radiolabelled ATP, or is an ELISA.

66. (Currently Amended) A method of inhibiting the activity or function of a JNK, particularly JNK3, which method comprises exposing a JNK to a compound as defined in ~~any of claims 1-14 or a composition as defined in any of claims 34-45~~ claim 1.

67. (Original) A method as claimed in claim 66, which is performed in a research model.

68. (Original) A method as claimed in claim 67, wherein the research model is an animal model.